AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims

41 (Original)   An electronic controlled method for combinatorial synthesis of a biopolymer, comprising the steps of:

forming a plurality of reaction locations on a substrate, each reaction location being individually electronically addressable;

forming an attachment layer upon each reaction location;

placing said reaction locations in contact with a solution containing a charged monomer-A;

selectively biasing those location at which reaction A is to occur at an opposite charge to monomer-A, and biasing those locations at which no reaction A is to occur the same charge as monomer-A;

concentrating and reacting monomer A on the specific A locations;

removing solution containing unreacted monomer A;

placing said reaction locations in contact with a solution containing a charged monomer B;

selectively biasing those locations for which reaction B is to occur at the opposite charge of monomer-B, and biasing those locations at which no reaction B is to occur the same charge as monomer-B;

concentrating and reacting monomer B on the specific B locations; and

repeating the process with monomer-A, monomer-B, to monomer-N, for n-number of times until all biopolymer sequences are complete.

42 (Previously presented)   A method for replicating a self-addressable electronic device addressed with specific DNA sequences, comprising the steps of:

hybridizing the complementary sequences to the specific DNA sequences addressed on a master self-addressable electronic device;

aligning unaddressed locations on a recipient self-addressable electronic device with the addressed locations on said master device; and

biasing the locations on said master device negative and the locations on said recipient device positive, transporting the complementary sequences to said recipient device.

43 (Previously presented)   The method for replicating patterned sequences of claim 42, further comprising denaturing the complementary sequences from the master template.

49-51 (Cancelled)